

**APPROVED**

**NAVY TRAINING SYSTEM PLAN**

**FOR THE**

**AN/SLQ-20B COUNTERMEASURES SET**

**N86-NTSP-A-30-9701/A**

**SEPTEMBER 1997**

**Enclosure (1)**

## **AN/SLQ-20B COUNTERMEASURES SET**

### **EXECUTIVE SUMMARY**

This Navy Training System Plan has been developed to identify the life cycle manpower, personnel, and training requirements to support the AN/SLQ-20B Countermeasures Set. The AN/SLQ-20B Countermeasures Set is a classified Electronic Warfare/Air Warfare Program, and is currently in Phase III (Production, Fielding/Deployment, and Operational Support) of the Weapon System Acquisition Process. Initial Operating Capability is planned for the third quarter fiscal year 1999.

The AN/SLQ-20B Countermeasures Set will be a form and fit replacement for the AN/SLQ-20A Countermeasures Set aboard aircraft carriers. The AN/SLQ-20B Countermeasures Set will initially operate on Airborne Early Warning/Ground Environment Integration System (AEGIS) DDG-51 class destroyers. Other ships that will eventually receive the AN/SLQ-20B Countermeasures Set include aircraft carriers and AEGIS class cruisers. The AN/SLQ-20B Countermeasures Set will provide all functions of the AN/SLQ-20A Countermeasures Set, while incorporating new technologies and capabilities. It will provide additional performance in the area of Built-In-Test (BIT), digital interfaces, and growth capability.

The AN/SLQ-20B Countermeasures Set maintenance concept will be a two level maintenance concept, organizational and depot. The maintenance concept for the Wideband Antenna will be depot level maintenance and repair only. The AN/SLQ-20B Countermeasures Set will use continuous and initiated BIT to detect and isolate failures. Organizational level repairs will primarily consist of the removal and replacement of Ship Replaceable Assemblies (i.e., circuit boards) and some Ship Replaceable Units (i.e., black boxes).

The manpower requirements for the AN/SLQ-20B Countermeasures Set are within the capabilities of the Navy's existing rating structure. No additional manpower will be required. Individual ship's manpower utilization for AN/SLQ-20B operator and maintenance requirements will be left up to the discretion of the ship's Commanding Officer. Operation of the system will normally be performed by Operations Specialist (OS) and Electronic Warfare Technician (EW) personnel. An EW may be replaced by another member from the advanced electronic field. Advanced electronic field personnel consist of EW, Cryptologic Technician (CT), and Fire Controlman (FC). Electronic Warfare Officers (EWO) may also operate the system. Advanced electronic field personnel will operate the Master Control Unit, while OS personnel and EWOs, functioning as the Tactical Action Officer, operate the Remote Control Units. Maintenance and verification of system operation will be performed by advanced electronic field personnel.

The training concept for the AN/SLQ-20B will consist of initial training and on-board Computer-Based Training (CBT) for operator and maintenance personnel. Naval Command, Control, and Ocean Surveillance Center (NCCOSC) Research Development, Test and Evaluation Division, (NRaD) San Diego, California, will be responsible for the development, distribution, and implementation of CBT for the AN/SLQ-20B. NRaD San Diego will act as the In-Service Engineering Activity (ISEA) and Software Support Activity (SSA) and, in conjunction with Naval Air Systems Command, will be responsible for maintaining and updating the CBT software.

AN/SLQ-20B COUNTERMEASURES SET

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LIST OF ACRONYMS

AEGIS	Airborne Early Warning/Ground Environment Integration System
ATC	AEGIS Training Center
BIT	Built-In-Test
BUPERS	Bureau of Naval Personnel
CBT	Computer-Based Training
CIC	Combat Information Center
CINCLANTFLT	Commander-in-Chief, Atlantic Fleet
CINCPACFLT	Commander-in Chief, Pacific Fleet
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
DA	Developmental Agency
DDG	Guided Missile Destroyer (ship class)
DIS	Distributed Interactive Simulation
DT	Developmental Test
EW	Electronic Warfare Technician
EWO	Electronic Warfare Officer
E&MD	Engineering and Manufacturing Development
FIT	Fleet Introduction Team
FY	Fiscal Year
GPETE	General Purpose Electronic Test Equipment
GPTE	General Purpose Test Equipment
ILSP	Integrated Logistics Support Plan
ISEA	In-Service Engineering Activity
MCU	Master Control Unit
MPT	Manpower, Personnel and Training
MSD	Material Support Date
NA	Not Applicable
NATSF	Naval Air Technical Services Facility
NAVAIRSYSCOM	Naval Air Systems Command

**AN/SLQ-20B COUNTERMEASURES SET**

NAVICP	Navy Inventory Control Point
NAVSEA	Naval Sea Systems Command
NCCOSC	Naval Command, Control, and Ocean Surveillance Center
NRaD	Naval Command, Control, and Ocean Surveillance Center Research Development, Test and Evaluation Division
NSD	Navy Support Date
NTSP	Navy Training System Plan
OJT	On-the-Job-Training
OPEVAL	Operational Evaluation
OPO	OPNAV Principal Official
OPTEVFOR	Operational Test and Evaluation Force
OS	Operations Specialist
OT	Operational Test
PEETE	Portable Electric Electronic Test Equipment
PMA	Program Manager - Air
PQS	Personnel Qualification Standards
RCU	Remote Control Unit
RDT&E	Research, Development, Test, and Evaluation
RF	Radio Frequency
SPETE	Special Purpose Electronic Test Equipment
SPTE	Special Purpose Test Equipment
SRA	Ship Replaceable Assemblies
SRU	Ship Replaceable Units
SSA	Software Support Activity
ST	Special Tools
TA	Training Agency
TBD	To Be Determined
TECHEVAL	Technical Evaluation
TSA	Training Support Agency
TTE	Technical Training Equipment
WAA	Wideband Antenna Assembly

**AN/SLQ-20B COUNTERMEASURES SET**

**PREFACE**

This Approved Navy Training System Plan (NTSP) updates the Proposed AN/SLQ-20B Countermeasures Set NTSP, N86-NTSP-A-30-9701/D, dated June 1997. This Approved NTSP updates the installation schedule, ready for training dates, and ready for operational use schedules.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

- 1. Nomenclature-Title-Acronym. AN/SLQ-20B Countermeasures Set
- 2. Program Element. PEO604777N

B. SECURITY CLASSIFICATION

- 1. System Characteristics ..... Secret
- 2. Capabilities ..... Secret
- 3. Functions..... Unclassified

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

- OPNAV Principal Official (OPO) Program Sponsor..... CNO (N865E)
- OPO Resource Sponsor ..... CNO (N869T2)
- Developing Agency..... NAVAIRSYSCOM (PMA213)
- Training Agency ..... CINCLANTFLT  
CINCPACFLT  
CNET  
ATC Dahlgren
- Training Support Agency ..... NAVAIRSYSCOM (PMA205)
- Manpower and Personnel Mission Sponsor ..... CNO (N1, N869)
- Director of Naval Training ..... CNO (N7)
- Chief of Naval Personnel..... BUPERS (PERS-4,  
PERS-40, PERS-53)

## **D. SYSTEM DESCRIPTION**

**1. Operational Uses.** The AN/SLQ-20B Countermeasures Set, from here on referred to as the AN/SLQ-20B, is a classified Electronic Warfare/Air Warfare Program that will initially operate on Airborne Early Warning/Ground Environment Integration System (AEGIS) DDG-51 class destroyers. Other ships that will eventually receive the AN/SLQ-20B include aircraft carriers and AEGIS class cruisers. The installation schedule for aircraft carriers and AEGIS class cruisers has not been determined. The AN/SLQ-20B will be a form and fit replacement for the AN/SLQ-20A Countermeasures Set aboard aircraft carriers. The AN/SLQ-20B will provide all functions of the AN/SLQ-20A Countermeasures Set while incorporating new technologies and capabilities.

**2. Foreign Military Sales.** Not Applicable (NA).

## **E. DEVELOPMENTAL TEST AND OPERATIONAL TEST**

**1. Developmental Test.** Technical Evaluation (TECHEVAL) for the AN/SLQ-20B with the Wideband Antenna Assembly (WAA) was completed by the Naval Command, Control, and Ocean Surveillance Center (NCCOSC) Research Development, Test and Evaluation (RDT&E) Division (NRaD), San Diego, California. TECHEVAL was conducted in two phases:

- Shore - Developmental Test (DT)-IIA from November 1995 to March 1996
- Ship - DT-IIB from March 1996 to September 1996

**2. Operational Test.** Operational Evaluation (OPEVAL) of the AN/SLQ-20B and WAA was conducted in one phase Operational Test (OT)-II aboard the USS John Paul Jones (DDG 53) from October to November 1996. Operational Test and Evaluation Force (OPTEVFOR), Norfolk, Virginia concluded the AN/SLQ-20B was operationally effective and operationally suitable and recommended fleet introduction.

**F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.** The AN/SLQ-20B will not replace any equipment on AEGIS DDG-51 class destroyers or AEGIS class cruisers. Aboard aircraft carriers, the AN/SLQ-20B will replace the AN/SLQ-20A Countermeasures Set.

## **G. DESCRIPTION OF NEW DEVELOPMENT**

**1. Functional Description.** The AN/SLQ-20B consists of a Radio Frequency (RF) Signal Processor Unit, a Master Control Unit (MCU), two Remote Control Units (RCUs), and a Diplexer Unit. In addition, a new AS-4305/SLQ WAA and modified antenna group, OE-374/SPS-67(V)4, using either an AN/SPS-67(V)4 Antenna (on AEGIS DDG-51 class destroyers) or an AN/SPS-49(V) Antenna (on aircraft carriers and AEGIS class cruisers), will be part of the



AN/SLQ-20B. These antennas will be developed under separate contracts managed by Naval Sea Systems Command (NAVSEA). The Antenna Assembly will be mounted on an existing modified shipboard radar antenna pedestal.

The AN/SLQ-20B will be capable of operating in the shipboard and battle group electromagnetic environment. The system will be designed to meet the shipboard environmental and other general requirements of MIL-STD-2036. The system will not require any external sensor data or tactical information from other systems to operate properly.

**2. Physical Description.** The weights and dimensions of the AN/SLQ-20B are:

COMPONENT	DIMENSIONS (INCHES)			WEIGHT (LBS.)
	LENGTH	HEIGHT	WIDTH	
RF Signal Processor Unit	10.75	16.20	19.30	97
MCU	8.80	11.00	7.50	13
Two RCUs	6.00	3.00	4.50	3
Diplexer Unit	3.00	10.00	13.50	14
WAA	11.00	97.00	9.00	48

**3. New Development Introduction.** The AN/SLQ-20B will be introduced as new production equipment. The first ship to receive a production version of this system will be the USS John Barry (DDG-52) in March 1999. At a future date, the AN/SLQ-20B will be retrofitted into aircraft carriers, replacing the AN/SLQ-20A and installed as a new system into AEGIS class cruisers.

**4. Significant Interfaces.** Power requirements for the AN/SLQ-20B are 115 volts alternating current, plus or minus 10 percent, at either 60 Hertz or 400 Hertz. The power consumption is approximately 750 watts. The AN/SLQ-20B will be capable of interfacing with the following systems:

- Display Systems for Combat Information Center (CIC) operators (for initial stand alone configuration)
- Multi-sensor Combat Identification Processor (future growth capability)
- AEGIS Command and Decision (C&D) computer (future growth capability)

**5. New Features, Configurations, or Material.** NA.

## H. CONCEPTS

**1. Operational Concept.** Operation of the system will normally be performed by Operations Specialist (OS) and Electronics Warfare Technician (EW) personnel. An EW may be replaced by another member from the advanced electronic field. Advanced electronic field personnel consist of EW, Cryptologic Technician (CT), and Fire Controlman (FC). The advanced electronic field personnel will operate the MCU via the Electronic Warfare Supervisor Console in the CIC. OS personnel function as the Identification and Air Warfare Console operator controlling the two AN/SLQ-20B RCUs. In addition, Electronic Warfare Officers who perform the duties of the Tactical Action Officer may also operate the RCU. During peacetime and non-battle wartime conditions, the system will utilize the training and other modes of operation that will not compromise the system's security.

**2. Maintenance Concept.** The AN/SLQ-20B maintenance concept consists of two levels of maintenance, organizational and depot. The maintenance concept for the WAA is depot level maintenance and repair only. The AN/SLQ-20B will use continuous and initiated Built-In-Test (BIT) to detect and isolate failures. Organizational level maintenance will primarily consist of the removal and replacement of Ship Replaceable Assemblies (SRAs) (i.e., circuit boards) and some Ship Replaceable Units (SRUs) (i.e., black boxes). If required, General Purpose Electronic Test Equipment (GPETE) and Portable Electric/Electronic Test Equipment (PEETE) will be used to supplement BIT for some fault isolation. Failed components will be returned to the depot for repair or disposition.

**a. Organizational.** Organizational level maintenance actions are limited to system check-out, fault isolation, servicing and inspection, and removal and replacement of assemblies, subassemblies, and certain chassis mounted components such as fuses, lamps, knobs and displays.

**(1) Preventive Maintenance.** Preventive maintenance on the AN/SLQ-20B will consist of inspection and servicing.

**(2) Corrective Maintenance.** Corrective maintenance will be accomplished per the AN/SLQ-20B technical manual. Fault isolation and detection will be accomplished using BIT. Malfunctions not isolated by BIT will be isolated utilizing shipboard GPETE and PEETE.

**b. Intermediate.** NA.

**c. Depot.** Depot level maintenance will consist of repairing failed assemblies, subassemblies, modules, and antennas. The antenna assembly will be repairable at the depot level only. Depot level maintenance will be established by the Navy Support Date (NSD) of March 1999. Presently, the depot facility has not been selected. This information will be included in future updates to this NTSP.

**d. Interim Maintenance.** There is no interim maintenance. The Material Support Date (MSD) and the NSD will both occur before the first shipboard installation.

**e. Life Cycle Maintenance Plan.** NA.

**3. Manning Concept.** Due to system simplicity ("black box" technology) and low Mean Time Between Failures of 500 hours (non-continual use), no additional manpower will be required to support the AN/SLQ-20B. Individual ship manpower utilization for AN/SLQ-20B operator and maintenance requirements will be left up to the discretion of the ship's Commanding Officer. Operation of the system will be on an as required basis, performed by currently assigned OS personnel. Verification of system operation, system failure, and corrective maintenance will be accomplished by currently assigned advanced electronic field personnel. Select personnel at the depot will be identified to receive depot level training on AN/SLQ-20B.

**4. Training Concept.** The training concept for the AN/SLQ-20B will consist of initial training and on-board Computer-Based Training (CBT) for operator and maintenance personnel. NRaD San Diego will be responsible for the development, distribution, and implementation of the CBT for the AN/SLQ-20B. NRaD San Diego will act as the In-Service Engineering Activity (ISEA) and Software Support Activity (SSA) and, in conjunction with Naval Air Systems Command (NAVAIRSYSCOM), will be responsible for maintaining and updating the CBT software. CBT software will be available June 1998. A laptop computer will be delivered with each AN/SLQ-20B Countermeasures Set to run CBT software.

Future plans are for the development of Distributed Interactive Simulation (DIS) that is compliant with the Battle Force Tactical Team Trainer. DIS is the complex networking of varied simulators in multiple geographic locations, which allows the user to see the results of their actions and the actions of other users nearly simultaneously. The primary mission of DIS is to provide team-oriented training to a battle group. It does this by creating synthetic, virtual representations of warfare environments by systematically connecting separate sub-components of simulation which reside at distributed, multiple locations.

The basic concept of DIS is an extension of the Simulation Networking program developed by the Defense Research Projects Agency that allows dissimilar simulators, distributed over a large geographical area, to interact in a team environment. These simulators communicate over local and wide area networks.

**a. Initial Training.** Initial training for the AN/SLQ-20B will be provided by the contractor for NRaD San Diego, Fleet Introduction Team (FIT) members, and depot maintenance personnel. Initial operator and organizational maintenance training for DT and OT personnel was conducted in April 1996 by the Engineering and Manufacturing Development (E&MD) contractor. Development and test engineers and Navy personnel, including OPTEVFOR representatives, attended this training.

**Title .....** **AN/SLQ-20B Operation and Maintenance**

Description ..... Operation and organizational maintenance of the AN/SLQ-20B with emphasis on corrective maintenance and use of BIT.

Location ..... Contractor facility / Hazeltine Corporation in Greenlawn, New York

Length ..... 12 days

RFT date ..... April 1996 (Completed)

TTE/TD ..... AN/SLQ-20B Countermeasure Set

Prerequisites ..... OS 0311, Operations Specialist Class A1, A-221-0011 and a Secret Security Clearance; EW 17XX, Electronic Warfare Technician Class A Basic Operations, A-102-0209 and a Secret Security Clearance; NOBC 9282, Ship's Electronic Warfare Officer, and a Secret Security Clearance

Initial training for installation and FIT personnel will be conducted at the Hazeltine Corporation's facility in December 1998 (three months prior to the installation of the first production unit).

**Title .....** **AN/SLQ-20B Operation and Maintenance**

Description ..... Operation and organizational maintenance of the AN/SLQ-20B with emphasis on corrective maintenance and use of BIT.

Location ..... Contractor facility / Hazeltine Corporation in Greenlawn, New York

Length ..... 12 days

RFT date ..... December 1998

TTE/TD ..... AN/SLQ-20B Countermeasure Set

Prerequisites ..... OS 0311, Operations Specialist Class A1, A-221-0011 and a Secret Security Clearance; EW 17XX, Electronic Warfare Technician Class A Basic Operations, A-102-0209 and a Secret Security Clearance; NOBC 9282, Ship's Electronic Warfare Officer, and a Secret Security Clearance

On-site training for operator and organizational maintenance personnel will be provided by the NaRD and FIT members at the time of installation. The AN/SLQ-20B has a training mode, so initial training can be supplemented with On-the-Job Training (OJT) using this mode. The following course will be provided upon installation.

<b>Title .....</b>	<b>AN/SLQ-20B Operation and Maintenance</b>
<b>Description .....</b>	Operation and organizational maintenance of the AN/SLQ-20B with emphasis on corrective maintenance and use of BIT
<b>Locations and RFT Dates ...</b>	<p>AEGIS Training Center (ATC) Wallops Island, Virginia (2nd qtr FY99)</p> <p>USS Barry DDG-52 (3rd qtr FY99)</p> <p>USS C. Wilber, DDG-54 (3rd qtr FY99)</p> <p>USS Stout, DDG-55 (3rd qtr FY00)</p> <p>USS J. S. McCain, DDG-56 (3rd qtr FY00)</p> <p>USS Mitscher, DDG-57 (3rd qtr FY00)</p> <p>USS Fitzgerald, DDG-62 (4th qtr FY00)</p> <p>USS Stethem, DDG-63 (4th qtr FY00)</p> <p>USS A. Burke, DDG-51 (4th qtr FY00)</p> <p>USS Carney, DDG-64 (3rd qtr FY01)</p> <p>USS J. P. Jones, DDG-53 (4th qtr FY01)</p> <p>USS Laboon, DDG-58 (4th qtr FY01)</p> <p>USS Russell, DDG-59 (3rd qtr FY02)</p> <p>USS Paul Hamilton, DDG-60 (3rd qtr FY02)</p> <p>USS Ramage, DDG-61 (3rd qtr FY03)</p>
<b>Length .....</b>	As required
<b>TTE/TD</b>	AN/SLQ-20B Countermeasure Set
<b>Prerequisites</b>	OS 0311, Operations Specialist Class A1, A-221-0011 and a Secret Security Clearance; EW 17XX, Electronic Warfare Technician Class A Basic Operations, A-102-0209 and a Secret Security Clearance; NOBC 9282, Ship's Electronic Warfare Officer, and a Secret Security Clearance

**b. Follow-on Training.** Currently, 14 shipboard AN/SLQ-20B have been procured. Student throughput, after initial start-up, does not warrant the establishment of a formal training course of instruction. Follow-on training will consist of on-board CBT and OJT

for operator and organizational maintenance personnel. OS personnel will require training in the operation of the AN/SLQ-20B RCU. This training will be conducted during pre-commissioning or team training at ATC Wallops Island. RCU operation training will also be conducted through OJT by previously trained crews, AEGIS Training Support Group, or FIT members. Due to the simplicity of the RCU, training will be approximately one hour. After initial depot level maintenance training, the depot will be responsible for their own on-going training requirements.

**c. Student Profiles**

<b>SKILL IDENTIFIER</b>	<b>PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS</b>
EW 17XX	A-102-0209, Electronic Warfare Technician Class A Basic Operations
OS 0311	A-221-0011, Operations Specialist Class A1

**d. Training Pipelines. NA.**

**I. ON-BOARD (IN-SERVICE) TRAINING.** NRaD San Diego will be responsible for the development, distribution, and implementation of the CBT for the AN/SLQ-20B. Additionally, NRaD San Diego in conjunction with NAVAIRSYSCOM PMA205-3B2 will be responsible for maintaining and updating the CBT software. The AN/SLQ-20B has a built in training mode that will be used for OJT to supplement the CBT.

**1. Proficiency or Other Training Organic to the New Development.** During the production contract, Hazeltine Corporation will be tasked with providing CBT for operator and organizational maintenance. The CBT will be provided upon site installation. Future plans are for the development of a DIS interface that is compliant with the Battle Force Tactical Team Trainer.

**a. Maintenance Training Improvement Program. NA.**

**b. Aviation Maintenance In-Service Training. NA.**

**2. Personnel Qualification Standards.** Shipboard Personnel Qualification Standards (PQS) will be developed for AN/SLQ-20B operators and maintenance personnel. Each activity will establish a PQS syllabus for RCU training to be included in the overall CIC watch station qualifications.

**3. Other On-Board or In-Service Training Packages. NA.**

## J. LOGISTICS SUPPORT

**1. Manufacturer and Contract Numbers.** The following are current outstanding contracts that apply to the AN/SLQ-20B program.

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N66001-93-C-0246 AN/SLQ-20B	Hazeltine Corporation	Greenlawn, New York
N0024-93-C-0246 AS-4305/SLQ Wideband Antenna Assembly	AIL Incorporated	Deer Park, New York

**2. Program Documentation.** The AN/SLQ-20B ILSP, ILSP-ATC-064 was approved on 27 January 1997.

**3. Technical Data Plan.** The E&MD contractor developed a preliminary technical manual to support DT and OT for the AN/SLQ-20B. The technical manual will be used as the primary information document during the RDT&E phase. The production contractor will be responsible for reviewing and updating the preliminary technical manual, during the E&MD phase. Technical manual validation will be accomplished by the government during DT and OT. Verification of the technical manuals will be accomplished during First Article Acceptance Testing by NRaD San Diego, Naval Air Technical Services Facility (NATSF), and the contractor. Two sets of technical manuals will be packaged and shipped with each system.

**4. Test Sets, Tools, and Test Equipment.** One design goal of the AN/SLQ-20B is to require no special support equipment for maintenance, repair, and calibration. Only GPETE and non-development PEETE will be used to supplement BIT. Required GPETE will be procured for shipboard maintenance requirements. For depot level maintenance, fault isolation beyond the capabilities of BIT will be accomplished using the following GPETE: Multimeter, oscilloscope, signal generator, spectrum analyzer, directional coupler, attenuator, power divider RF, dummy load, and power meter.

**5. Repair Parts.** The Navy Inventory Control Point (NAVICP) will maintain stock levels at Navy Supply Centers and fleet ISEAs. Fleet users will requisition these items from NAVICP via Military Standard Requisition and Issue Procedures.

**6. Human Systems Integration.** NA.

## K. SCHEDULES

### 1. Installation and Delivery Schedule

#### AN/SLQ-20B INSTALLATION SCHEDULE

ACTIVITY	FY99				FY00				FY01				FY02				FY03			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NRaD San Diego		2																		
DDG-52			1																	
DDG-54			1																	
DDG-55					1															
DDG-56						1														
DDG-57						1														
DDG-62							1													
DDG-63							1													
DDG-51							1													
DDG-64									1											
DDG-53										1										
DDG-58										1										
DDG-59													1							
DDG-60													1							
DDG-61																	1			

### 2. Ready For Operational Use Schedule

#### AN/SLQ-20B READY FOR OPERATIONAL USE SCHEDULE

ACTIVITY	FY99				FY00				FY01				FY02				FY03			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
NRaD San Diego			X																	
DDG-52				X																
DDG-54				X																
DDG-55							X													
DDG-56							X													
DDG-57							X													
DDG-62							X													
DDG-63								X												
DDG-51								X												
DDG-64										X										
DDG-53												X								
DDG-58												X								
DDG-59													X							
DDG-60														X						
DDG-61																			X	



**3. Time Required to Install at Operational Sites.** Approximately 30 days will be required for equipment installation and checkout at each site.

**4. Foreign Military Sales and Other Source Delivery Schedule.** NA.

**5. Training Device and Delivery Schedule.** OS personnel will require training in the operation of the AN/SLQ-20B RCU. This training will be conducted during pre-commissioning or during team training at ATC Wallops Island. One AN/SLQ-20B and one CBT system will be provided for this training.

ACTIVITY	FY99				FY00				FY01				FY02				FY03			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ATC Wallops Island		1																		

**L. GOVERNMENT FURNISHED EQUIPMENT AND CONTRACTOR FURNISHED EQUIPMENT TRAINING REQUIREMENTS.** NA.

**M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS**

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
Manpower, Personnel, and Training Concept Document For The AN/SLQ-20B Countermeasures Set Program	NA	PMA213	Approved Jan 96
ILSP for the AN/SLQ-20B	ILSP-ATC-064	PMA213	Approved Jan 97
User's Logistics Support Summary For The AN/SLQ-20B	ULSS-ATC-064	PMA213	Approved Jan 97

## PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the AN/SLO-20B Countermeasures Set and, therefore, are not included in Part II of this NTSP:

### II.A. Billet Requirements

- II.A.1.a. Operational and Fleet Support Activity Activation Schedule
- II.A.1.b. Billets Required for Operational and Fleet Support Activities
- II.A.1.c. Total Billets Required for Operational and Fleet Support Activities
- II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule
- II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities
- II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities
- II.A.3. Training Activities Instructor and Support Billet Requirements
- II.A.4. Chargeable Student Billet Requirements
- II.A.5. Annual Incremental and Cumulative Billets

### II.B. Personnel Requirements

- II.B.1. Annual Training Input Requirements

**Note:** Part II of this NTSP is not affected by the AN/SLO-20B Countermeasures Set. No new billets are required for the operation and maintenance of the AN/SLO-20B Countermeasures Set. The type rating and number of personnel receiving initial training upon equipment installation will be at the discretion of individual activity Commanding Officers, therefore, no elements of Part II are included in this NTSP.

## **PART III - TRAINING REQUIREMENTS**

The following elements are not affected by the AN/SLO-20B Countermeasures Set and, therefore, are not included in Part III of this NTSP:

### **III.A.2. Follow-on Training**

#### **III.A.2.a. Existing Courses**

#### **III.A.2.b. Planned Courses**

#### **III.A.2.c. Unique Courses**

### **III.A.3. Existing Training Phased Out**

## PART III - TRAINING REQUIREMENTS

### III.A.1. INITIAL TRAINING REQUIREMENTS

**COURSE TITLE:** AN/SLQ-20B Countermeasures Set Operation and Maintenance  
**COURSE DEVELOPER:** Hazeltine Corporation  
**COURSE INSTRUCTOR:** Hazeltine Corporation, Greenlawn, New York  
**COURSE LENGTH:** 12 days

LOCATION, UIC	DATE	STUDENTS			ACTIVITY DESTINATION
	BEGIN	OFF	ENL	CIV	
Hazeltine Corp. NA	Dec 98	Note 1	Note 1	0	NRaD FIT Depot

**COURSE TITLE:** AN/SLQ-20B Countermeasures Set Operation and Maintenance for DT and OT  
**COURSE DEVELOPER:** Hazeltine Corporation  
**COURSE INSTRUCTOR:** Hazeltine Corporation, Greenlawn, New York  
**COURSE LENGTH:** 12 days

LOCATION, UIC	DATE	STUDENTS			ACTIVITY DESTINATION
	BEGIN	OFF	ENL	CIV	
Hazeltine Corp. NA	Apr 96	Note 1	Note 1	0	DT Engineers OPTEVFOR DDG personnel

Further initial training will be required at each installation site upon installation. The installation sites listed below will require this OJT.

AEGIS Training Center (ATC) Wallops Island, Virginia (2nd Qtr FY99)  
USS Barry DDG-52 (3rd Qtr FY99)  
USS C. Wilber, DDG-54 (3rd Qtr FY99)  
USS Stout, DDG-55 (3rd Qtr FY00)  
USS J. S. McCain, DDG-56 (3rd Qtr FY00)  
USS Mitscher, DDG-57 (3rd Qtr FY00)  
USS Fitzgerald, DDG-62 (4th Qtr FY00)  
USS Stethem, DDG-63 (4th Qtr FY00)  
USS A. Burke, DDG-51 (4th Qtr FY00)  
USS Carney, DDG-64 (3rd Qtr FY01)  
USS J. P. Jones, DDG-53 (4th Qtr FY01)  
USS Laboon, DDG-58 (4th Qtr FY01)  
USS Russell, DDG-59 (3rd Qtr FY02)  
USS Paul Hamilton, DDG-60 (3rd Qtr FY02)  
USS Ramage, DDG-61 (3rd Qtr FY03)

**Note 1:** The type (rating) and number of personnel to be trained is not known. Individual activity Commanding Officers will designate personnel to receive initial training when the AN/SLQ-20B Countermeasures Set is installed.

## **PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

The following elements are not affected by the AN/SLQ-20B Countermeasures Set and, therefore, are not included in Part IV of this NTSP.

### **IV.A Training Hardware**

#### **IV.A.2 Training Devices**

### **IV.C Facility Requirements**

#### **IV.C.1 Facility Requirements Summary (Space/Support) by Activity**

#### **IV.C.2 Facility Requirements Detailed by Activity and Course**

#### **IV.C.3 Facility Project Summary by Program**

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

### IV.A. TRAINING HARDWARE

#### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

TRAINING ACTIVITY: ATC

LOCATION, UIC: Wallops Island, Virginia 45534

CIN, COURSE TITLE: NA, PRE-COMM/Team Training

ITEM NUMBER	EQUIPMENT	TYPE OR RANGE OF REPAIR PARTS	QUANT REQUIRED	DATE REQUIRED	GFE CFE	STATUS
TTE						
001	AN/SLO-20B Countermeasures Set	See note	1	2nd Qtr FY99	GFE	
002	Laptop Computer	See note	1	2nd Qtr FY99	GFE	
GPETE						
003	Multimeter	See note	1	2nd Qtr FY99	GFE	
004	Oscilloscope	See note	1	2nd Qtr FY99	GFE	
005	Signal Generator	See note	1	2nd Qtr FY99	GFE	
006	Spectrum Analyzer	See note	1	2nd Qtr FY99	GFE	
007	Directional Coupler	See note	1	2nd Qtr FY99	GFE	
008	Attenuator	See note	1	2nd Qtr FY99	GFE	
009	Power Divider RF	See note	1	2nd Qtr FY99	GFE	
010	Dummy Load	See note	1	2nd Qtr FY99	GFE	
011	Power Meter	See note	1	2nd Qtr FY99	GFE	

**Note:** Repair parts for TTE will be requisitioned through normal supply channels.

#### IV.B.1. TRAINING SERVICES

COURSE/TYPE OF TRAINING	SCHOOL LOCATION/UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
AN/SLO-20B Operation and Maintenance Initial training	Hazeltine Corp. Greenlawn, New York NA	Note 1	2	1st Qtr FY99

COURSE/TYPE OF TRAINING	SCHOOL LOCATION/UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
AN/SLO-20B Operation and Maintenance Initial training For DT and OT	Hazeltine Corp. Greenlawn, New York NA	12	2	Completed 3rd Qtr FY96

Further initial training will be required at each installation site upon installation. The below listed installation sites will require this OJT.

AEGIS Training Center (ATC) Wallops Island, Virginia (2nd Qtr FY99)  
 USS Barry DDG-52 (3rd Qtr FY99)  
 USS C. Wilber, DDG-54 (3rd Qtr FY99)  
 USS Stout, DDG-55 (3rd Qtr FY00)  
 USS J. S. McCain, DDG-56 (3rd Qtr FY00)  
 USS Mitscher, DDG-57 (3rd Qtr FY00)  
 USS Fitzgerald, DDG-62 (4th Qtr FY00)  
 USS Stethem, DDG-63 (4th Qtr FY00)  
 USS A. Burke, DDG-51 (4th Qtr FY00)  
 USS Carney, DDG-64 (3rd Qtr FY01)  
 USS J. P. Jones, DDG-53 (4th Qtr FY01)  
 USS Laboon, DDG-58 (4th Qtr FY01)  
 USS Russell, DDG-59 (3rd Qtr FY02)  
 USS Paul Hamilton, DDG-60 (3rd Qtr FY02)  
 USS Ramage, DDG-61 (3rd Qtr FY03)

**Note 1:** The type (rating) and number of personnel to be trained is not known. Individual activity Commanding Officers will designate personnel to receive initial training when the AN/SLO-20B Countermeasures Set is installed.

#### IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

**TRAINING ACTIVITY:** ATC

**LOCATION, UIC:** Wallops Island, Virginia 45534

**CIN, COURSE TITLE:** NA, PRE-COMM/Team Training

TYPES OF MATERIAL OR AID	QUANT REQD	DATE REQD	STATUS
CBT software	1	2nd Qtr FY99	

**Note:** Individual DDG-51 Class ships will receive CBT software and a laptop computer upon installation of the AN/SLQ-20B Countermeasures Set. See Part I.K.1.a. for installation schedules.



#### IV.B.3. TECHNICAL MANUALS

TRAINING ACTIVITY: ATC  
LOCATION, UIC: Wallops Island, Virginia 45534  
CIN, COURSE TITLE: NA, PRE-COMM/Team Training

TECHNICAL MANUAL TITLE, NUMBER	MEDIUM	QUANT REQD	DATE REQD	STATUS
AN/SLQ-20B Countermeasures Set Operation and Maintenance Manual, TBD	Hard copy	15	2nd Qtr FY99	

## PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
DA	Award Engineering and Manufacturing Development Contract	8/93	Completed
DA	Promulgate ILS Master Plan	8/93	Completed
TA	Commence Analysis of Manpower Personnel and Training	2/95	Completed
NCCOSC	Commence DT	11/95	Completed
TA	Commence Initial training	4/96	Completed
NCCOSC	DT Completed	9/96	Completed
OPTEVFOR	Commence OT	10/96	Completed
OPTEVFOR	OT Completed	11/96	Completed
TSA	Promulgate Draft NTSP to ALCON for Review and Comment	2/97	Completed
TSA	Proposed NTSP Submitted to OPNAV	7/97	Completed
TSA	Chair NTSP Conference	TBD	
TSA	Commence CBT	6/98	
DA	Achieve Navy Support Date and Material Support Date	3/99	
DA	Fleet Introduction	3/99	

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
None			

## PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	TELEPHONE NUMBERS COMMERCIAL, DSN, FAX INTERNET ADDRESS
CDR J. Horn CNO N865E	ACNO/DMSO Program Sponsor	(703) 695-5006, DSN 225-3772 (703) 614-9223 (fax)
CDR R. Huber CNO N869T2	Surface Warfare Training-Combat	(703) 614-6087, DSN 224 (703) 614-8540 (fax) n689t2@n4.opnav.navy.mil
AZCS G. Greenlee CNO N122C1D	Manpower and Personnel	(703) 695-3219, DSN 225
LT T. Junor CNO N122C2D	Surface Ships Manpower	(703) 695-3108, DSN 225
Mr. R. Zweibel CNO N751	Training Technology Policy	(703) 614-1344, DSN 224
EWCS (SW) S. Foster BUPERS PERS 408CL1	EW Manpower Requirements	(703) 695-1147, DSN 225
OSCM (SW) J. Regina BUPERS PERS 406CQ	OS Manpower Requirements	(703) 697-6756, DSN 227
Mr. F. Feuring NAVMAC Code 42	Head Ships Manpower Requirements	(901) 874-5468, DSN 882 (901) 874-5966 (fax)
CAPT D. Schwikert NAVAIRSYSCOM PMA213	ATC/LS Program Manager	(301) 862-6301, DSN 342-3512 ext. 6301
CDR Z. Henry NAVAIRSYSCOM PMA2133	ATC/LS Deputy Program Manager for Combat ID Systems	(301) 862-6313, DSN 342-3512 ext 6313 (301) 862-6328 (fax) henryza%an5@mr.nawcad.navy.mil
LCDR E. Hawkins CINCLANTFLT N721	Aviation NTSP Manager	(757) 322-0101 DSN 565

## PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	TELEPHONE NUMBERS COMMERCIAL, DSN, FAX INTERNET ADDRESS
LT Takamnya CINCPACFLT N321	Fleet Training and Readiness	(808) 474-6965, DSN 474
LCDR W. Calderwood COMNAVSURFPAC N23	Force EWO	(619) 437-5458, DSN 577 (619) 437-2791 (fax) n232@cnsn.navy.mil
LCDR J. Pope COMNAVSURFPAC N432	Combat Systems	(619) 437-2748, DSN 577 (619) 437-2791 (fax) n432@cnsn.navy.mil
EWCS R. Hood COMNAVSURFPAC N23A	Force EW	(619) 437-3318, DSN 577 (619) 437-2791 (fax) n23a@cnsn.navy.mil
EWCS R. Pei COMNAVSURFPAC N4321B	Combat Systems	(619) 437-3251, DSN 577 (619) 437-2791 (fax) n2321b@cnsn.navy.mil
QMC M. Watts NETPDTC N34	PQS Development Group	(904) 452-1702, DSN 922
CDR T. Swanson CNET T232	Combat Systems Training	(904) 452-4918, DSN 922 (904) 452-4104 (fax)
CDR R. Martin CNET T251	Aviation Technical Training	(904) 452-4915, DSN 922
Mr. E. Scheye CNET T252	Aviation Navy Training Plan Manager	(904) 452-4853, DSN 922
EWCM R. Putnam CNET T23413	AN/SLO-20B School Program Manager	(850) 452-4921, DSN 922 922-8917 (fax) cnet.t23413@smtp.cnet.navy.mil
FCCM R. Morgan ATC Dahlgren AN3B	Training Program Coordinator	(540) 643-5274, DSN 249 249-4129 (fax) morgan_richard_fccm.at.aegis.tracen@hq.navc. navy.mil

## PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	TELEPHONE NUMBERS COMMERCIAL, DSN, FAX INTERNET ADDRESS
ACCS D. Langford NAVAIRSYSCOM PMA205-3B2	ATC/LS Training Support Agent	(301) 757-8133, DSN 757-8133, (301) 757-6945 (fax)
Mr. R. Smith NAVAIRSYSCOM AIR-3.1.4.1.B	ATC/LS APML	(301) 862-6310, DSN 342-3512 ext 6310
Mr. J. Alexander NAVAIRSYSCOM AIR-3.1.4.1.B1	ATC/LS Deputy APML	(301) 862-6309, DSN 342-3512 ext 6309
Mr. T. Rudy NRaD Code 334	ISEA Manager	(619) 524-3486, DSN 524
Mr. K. Avedisian NRaD Code 305L	AN/SLQ-20B Logistics Manager	(619) 524-2089, DSN 524
Ms. P. Howard NCCOSC RDT&E NRaD-D022103	NCCOSC RDT&E	(619) 553-4507, DSN 553
Mr. S. Miyashiro NCCOSC RDT&E NraD-D4515	AN/SLQ-20B Acquisition Manager	(619) 553-3606, DSN 553 (619) 553-6875 (fax) miyiff@nosc.mil
Mr. J. Quintana NCCOSC RDT&E NraD-D4525	AN/SLQ-20B Systems Engineer	(619) 553-3549, DSN 553 (619) 553-6875 (fax) quintana@nosc.mil
Mr. M. Tadder NAVSEASYSYSCOM SEA-91W3D8	Antenna Program Manager	(703) 602-0843, ext. 317, DSN 664
Mr. M. McDesmond NAWCAD Lakehurst Code 3.1.4	AN/SLQ-20B LSA Manager	(908) 323-2097, DSN 624
Mr. C. Rocha NATSF NATSF 3.3.1.21CR	AN/SLQ-20B Technical Manuals	(215) 697-5329, DSN 442 (215) 697-5318 (fax) crocha@natsfgw.natsf.navy.mil

## PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	TELEPHONE NUMBERS COMMERCIAL, DSN, FAX INTERNET ADDRESS
Mr. Phil Szczyglowski NAVAIRSYSCOM 3.4.1	Competency Manager	(301) 757-9182, DSN 757-9182 (301) 342-4723 (fax) szczyglowski_phil%pax8b@mr.nawcad.navy.mil
AVCM Roger Lovern NAVAIRSYSCOM 3.4.1	NTSP Manager	(301) 757-9183, DSN 757-9183 (301) 342-4723 (fax) lovern_roger%pax8b@mr.nawcad.navy.mil
ATCS Steve Worthen NAVAIRSYSCOM 3.4.1	NTSP Coordinator	(301) 757-9194, DSN 757-9194 (301) 342-4723 (fax) worthen_stephen%pax8b@mr.nawcad.navy.mil